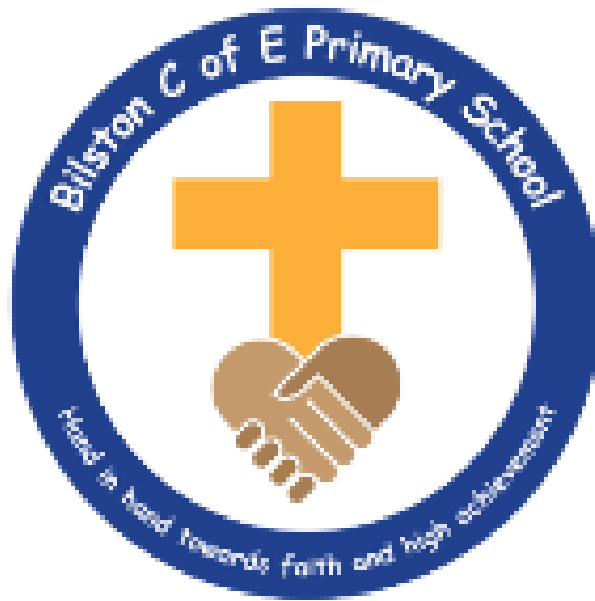


Mathematics at Bilston Church of England Primary School



We will aspire through our Christian beliefs and attitudes for all children in our care to flourish both academically and personally; develop respect for others and to reach out to their local and global communities, so, 'hand in hand together with faith we will strive to achieve all things...

'I am able to do all things through him (Jesus) who strengthens me.'

Philippians 4:13

All Scripture is breathed out by God and profitable for teaching, for reproof, for correction, and for training in righteousness.

Intent for the teaching of Mathematics

As mathematics is important and integral for everyday life we endeavour to ensure that children develop a healthy and enthusiastic attitude towards mathematics that will stay with them. Our Mathematics curriculum is intended to ensure that children have access to a high-quality Mathematics curriculum that builds knowledge and skills incrementally and allows them to use their knowledge in all areas of mathematics to solve real-life problems. Our mathematics curriculum is designed with the intent that each child will become fluent, confident and competent in the basics of mathematics, developing their ability to calculate, to reason and to solve problems through the learning of formal and mental strategies and applying these skills to increasingly complex problems.

We want the children to:

- become fluent in the fundamentals of mathematics and develop conceptual understanding as well as the ability to recall and apply knowledge rapidly and accurately
- be able to solve problems and reason mathematically
- use mathematical language
- be able to use and apply their mathematical knowledge, skills and understanding to science, other subjects and real life contexts.

Implementation of Mathematics

The National Curriculum sets out what must be taught in each Key Stage.

- The school's Long term plan for Mathematics, details the order in which units are taught. Our maths curriculum is split into three terms. Each term has twelve weeks of planned mathematics teaching, covering the programmes of study.
- The school's Medium Term Plan and Calculations Policy are used by teachers to plan, this will drive the journey of mathematics for every year group, from Concrete to Pictorial, then onto Abstract. Each weeks' worth of work encourages children's fluency with problem solving and reasoning embedded within lessons.
- We want to promote an enjoyment and enthusiasm for learning through engaging lessons which encourage children to solve problems and reason about numbers in a range of contexts.
- Developing a range of mental calculation skills specific for each year group ensuring progression.
- Developing an understanding of the importance of Mathematics in everyday life.
- Ensuring Mathematics teaching is lively and engaging and involves a carefully planned blend of approaches and use of manipulatives that direct and support children's learning.

Each class in both Key Stage 1 and Key Stage 2 will provide children with a daily lesson for mathematics, which will be an hour in duration. There will also be time given before registration to rehearse prior learning to develop fluency.

The structure of the lessons will have problem solving and reasoning embedded in every lesson and use a variety of teaching and learning styles, in order to develop children's knowledge, skills and understanding in mathematics. We will do this through a daily lesson that will include a high proportion of whole-class and group-direct teaching. During these lessons, we will encourage children to ask as well as answer mathematical questions. They will have the

opportunity to use a wide range of resources and apparatus to make the learning opportunities concrete.

Learning opportunities for all children will be matched to ability, this will be achieved through a range of strategies. We use classroom assistants to support children across all ability groups and to ensure that learning is matched to the needs of individuals.

In addition, mathematics will play a part in other subjects, where children will be able to develop and apply their mathematical skills. For example, collecting and presenting data in Computing, Science and Geography.

The Leader of Mathematics will ensure that the curriculum is reviewed and kept up to date, with the latest research and methods. All staff will be informed, trained and have regular CPD to guarantee there is a common understanding of how to achieve high quality mathematics teaching and learning.

Daily Learning

Lessons start with a clear WALT (we are learning to) for the lesson. Children will reflect on their learning from yesterday, this will be the starting block for the new learning. Adults will model the learning using a variety of manipulatives and will continually ask open questions throughout to embed understanding.

Children will be exposed to challenges (independent learning tasks) during the lesson, this will vary due to the children's understanding or the new learning that is taking place. Adults will consistently use assessment for learning.

Adults will model the correct use of mathematical language and encourage pupils to use this throughout every lesson.

All children will be taught the same, excluding the children who have specific needs in maths.

All classes have an extra adult in their classroom. These adults will target primarily pupil premium children to ensure that the attainment gap closes.

All children will sit in mixed ability seats, with exception to those children with specific needs. This encourages peer support for some

and allows all children to talk through mathematical strategies, therefore embedding their understanding. Children will be challenged through key questioning by adults.

Each weeks set of lessons are carefully planned to ensure progression of skills, knowledge and understanding.

Impact of Mathematics

The impact of a high – quality curriculum in maths is assessed through summative and formative assessment. Quality first teaching means that adults intervene quickly and assess the learning occurring in their classroom and make amendments. The curriculum is planned to ensure children have ample opportunities to revisit areas of knowledge and to build upon these.

We use internal data termly (STAT SHEFFIELD) for teachers and leaders to reflect on every pupil and carry out pupil progress meetings to identify issues and areas to support specific individuals. Children complete NFER tests termly, these give adults a standardised score, this can support the teacher’s judgement or create a professional discussion, with a member of SLT (senior leadership team), about the child’s needs. Using this data, teachers make amendments to planning based on this and leaders may plan interventions if accelerated progress is needed.

As a school, we moderate children’s work on a termly basis. These professional discussions are vital for teachers and as a whole school. All the above is monitored through learning walks, book scrutiny, and data collection and during pupil progress meetings.

2020 Spring Data – Coronavirus Outbreak

EYFS	GLD number	GLD SSM	Overall GLD for maths
	43%	40%	42%

Year 1 (60)	Below (-2 steps or below)	Working Towards (-1 step)	On Track (0 steps)	Exceeding (1 step)	Working Beyond (2 steps or above)
Maths	12%	27%	55%	7%	0%

Year 2 (60)	Below (-2 steps or below)	Working Towards (-1 step)	On Track (0 steps)	Exceeding (1 step)	Working Beyond (2 steps or above)
Maths	12%	18%	62%	8%	0%

Year 3 (60)	Below (-2 steps or below)	Working Towards (-1 step)	On Track (0 steps)	Exceeding (1 step)	Working Beyond (2 steps or above)
Maths	15%	35%	40%	10%	0%

Year 4 (62)	Below (-2 steps or below)	Working Towards (-1 step)	On Track (0 steps)	Exceeding (1 step)	Working Beyond (2 steps or above)
Maths	18%	15%	56%	11%	0%

Year 5 (64)	Below (-2 steps or below)	Working Towards (-1 step)	On Track (0 steps)	Exceeding (1 step)	Working Beyond (2 steps or above)
Maths	9%	20%	58%	13%	0%

Year 6 (60)	Below (-2 steps or below)	Working Towards (-1 step)	On Track (0 steps)	Exceeding (1 step)	Working Beyond (2 steps or above)
Maths	18%	13%	47%	22%	0%

How we are Improving Mathematics in 2021-2022

- Rigorous monitoring is to take place regularly – with NQT's and new or additional staff being given more support and consistent feedback.
- STAT Sheffield tracking system will be used more rigorously from the start of the year to ensure assessments are accurate.

- Moving towards a Mastery approach for Mathematics with support and training from SHAW Maths Hub after Mastery Readiness programme that was partially undertaken last academic year.
- Maths CPD for staff including INSET day.
- Purchasing resources to support Mastery Approach for Mathematics
- Embedding the mastery approach to mathematics.

TO BE UPDATED JULY 2022